

REMARKS

Claims 1, 2, 4, 6, and 8 are pending. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 4, 6 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. (U.S. Pat. No. 6,921,148). This rejection is respectfully traversed.

Claim 1 recites a continuous-treatment apparatus for subjecting a surface of a substrate for a display device, which is targeted for treatments, to continuous plural types of treatments. The apparatus comprises a substrate carrier and plural types of treatment units. The plural types of treatment units include a cleaning treatment unit that has a nozzle that blows cleaning solution onto the surface targeted for treatments at an angle less than 45 degrees. The cleaning treatment unit also has a recovery path formed by an inclined end surface of the nozzle and an opposite surface from the end surface. The opposite surface is perpendicular to the surface targeted for treatments and is connected to an inclined surface near the surface targeted for treatments. The recovery path includes top end surfaces that are disposed with a predetermined gap from the surface targeted for treatment. The recovery path is evacuated to a pressure that is less than atmospheric pressure. Nakamura et al. does not teach or suggest the continuous-treatment apparatus recited by claim 1.

Nakamura et al. describes a plasma processing device with a preliminary heating processing chamber, first and second plasma processing chambers, a cooling processing chamber, and a transport device which transports a base plate into each of the processing chambers which are arranged radially around the transport device. Nakamura et al. Col. 76, Lines 33 to 41. Nakamura et al. is silent as to a cleaning treatment unit that has a nozzle that blows cleaning solution onto the surface targeted for treatments at an angle less than 45 degrees, a recovery path formed by an inclined end surface of the nozzle and an opposite surface from the end surface, the opposite surface being perpendicular to the surface targeted for treatments and connected to an inclined surface near the surface targeted for treatments. Nakamura et al. is also silent as to a recovery path that includes top end surfaces that are disposed with a predetermined gap from the surface targeted for treatment. Nakamura et al. is also silent as to a recovery path that is evacuated to a pressure that is less than atmospheric pressure.

For these reasons, Nakamura et al. does not teach each and every element of claim 1. With regard to claim 4, Applicants note that claim 4 depends from claim 1, which defines over the prior art as discussed in detail above. Therefore, claim 4 also defines over the prior art. Reconsideration and withdrawal of the rejections are respectfully requested.

Claim 6 recites a continuous-treatment method for subjecting a surface of a substrate for a display device, which is targeted for treatments, to continuous plural types of treatments with plural types of treatment units. The plural types of treatment units include a cleaning treatment unit having a nozzle that blows cleaning solution onto

the surface targeted for treatments at an angle less than 45 degrees, and has a recovery path formed by an inclined end surface of the nozzle and an opposite surface from the end surface. The opposite surface is perpendicular to the surface targeted for treatments and is connected to an inclined surface near the surface targeted for treatments. The recovery path includes top end surfaces that are disposed with a predetermined gap from the surface targeted for treatment. The recovery path is evacuated to a pressure that is less than atmospheric pressure. Similar limitations are recited by claim 1, discussed above.

For at least the reasons discussed above, Nakamura et al. does not teach each and every element of claim 6. With regard to claim 8, Applicants note that claim 8 depends from claim 6, which defines over the prior art as discussed in detail above. Therefore, claim 8 also defines over the prior art. Reconsideration and withdrawal of the rejections are respectfully requested.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable Nakamura (U.S. Pat. No. 6,921,148) as applied to claim 1, and further in view of Goodwin (U.S. Pat. No. 5,324,155). This rejection is respectfully traversed.

Applicants note that claim 2 depends from claim 1, which defines over the prior art as discussed in detail above. Therefore, claim 2 also defines over the prior art. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1, 2, 4, 6 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cady (U.S. Pat. No. 4,544,446). This rejection is respectfully traversed.

Cady describes a chemical reactor for VLSI purposes that includes a fluid flow guide spaced from a substrate in the form of a wafer supported on a holder. Cady, Col. 7, Lines 14-17; Figure 2. Cady, like Nakamura et al., is silent as to a cleaning treatment unit that has a nozzle that blows cleaning solution onto the surface targeted for treatments at an angle less than 45 degrees, a recovery path formed by an inclined end surface of the nozzle and an opposite surface from the end surface, the opposite surface being perpendicular to the surface targeted for treatments and connected to an inclined surface near the surface targeted for treatments. Cady is also silent as to a recovery path that includes top end surfaces that are disposed with a predetermined gap from the surface targeted for treatment. Cady is also silent as to a recovery path that is evacuated to a pressure that is less than atmospheric pressure.

For these reasons, Cady does not teach each and every element of claims 1 and 6. With regard to claim 2, 4, and 8, Applicants note that each depends from claim 1 or claim 6, which define over the prior art as discussed in detail above. Therefore, claims 2, 4, and 8 also define over the prior art. Reconsideration and withdrawal of the rejections are respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: _____

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By: _____

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